

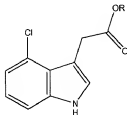
## AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listing, of claims in the application:

Claims 1-4 (Canceled)

Claim 5. (Currently Amended) A root-inducing system comprising:

a solution comprising water and a root inducing compound of formula I



wherein R is selected from the group consisting of hydrogen, allyl, methyl, ethyl, 1-propyl, 2-propyl, 1-butyl, isobutyl, (R)2-butyl, (S)2-butyl, tert-butyl and 1-pentyl;

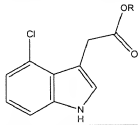
a rootless cutting having at least one leaf;

wherein the root inducing compound of formula I is in a concentration sufficient to induce the generation of roots from the rootless cutting when the solution is applied to the at least one leaf of the rootless cutting; and

a sprayer to apply the solution to the rootless cutting.

Claim 6. (Previously presented) The root-inducing system of claim 5 wherein the compound has a concentration of  $10^{-7}$  to  $10^{-2}$  M.

Claim 7. (Currently amended) ~~A~~ The root-inducing system of claim 5 further comprising:  
a solution comprising water, an alcohol, and a root inducing compound of formula I



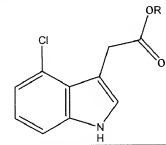
wherein R is selected from the group consisting of hydrogen, allyl, methyl, ethyl, 1-propyl, 2-propyl, 1-butyl, isobutyl, (R)2-butyl, (S)2-butyl, tert-butyl and 1-pentyl;

a rootless cutting having at least one leaf;

wherein the root inducing compound of formula I is in a concentration sufficient to induce the generation of roots from the rootless cutting when the solution is applied to the at least one leaf of the rootless cutting; and

a sprayer to apply the solution to the rootless cutting.

Claim 8. (Currently amended) ~~A~~ The root-inducing system of claim 5 further comprising:  
a solution comprising water, a polyoxyethylenealkyl phenyl ether, and a root inducing compound of formula I



wherein R is selected from the group consisting of hydrogen, allyl, methyl, ethyl, 1-propyl, 2-propyl, 1-butyl, isobutyl, (R)2-butyl, (S)2-butyl, tert-butyl and 1-pentyl;

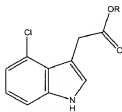
a rootless cutting having at least one leaf;

wherein the root inducing compound of formula I is in a concentration sufficient to induce the generation of roots from the rootless cutting when the solution is applied to the at least one leaf of the rootless cutting; and

a sprayer to apply the solution to the rootless cutting.

Claim 9. (Previously presented) The root-inducing system of claim 5 further comprising:  
an organic solvent.

Claim 10. (Currently amended) ~~A~~ The root-inducing system of claim 9 wherein comprising: a solution comprising water, the organic solvent is xylene, and a root-inducing compound of formula I

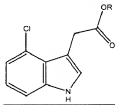


wherein R is selected from the group consisting of hydrogen, allyl, methyl, ethyl, 1-propyl, 2-propyl, 1-butyl, isobutyl, (R)2-butyl, (S)2-butyl, tert-butyl and 1-pentyl;  
a rootless cutting having at least one leaf;  
wherein the root-inducing compound of formula I is in a concentration sufficient to induce the generation of roots from the rootless cutting when the solution is applied to the at least one leaf of the rootless cutting; and  
a sprayer to apply the solution to the rootless cutting.

Claim 11. (Previously presented) The root-inducing system of claim 5 further comprising:  
a beneficial agricultural chemical, wherein the beneficial agricultural chemical is selected from the group consisting of fertilizers, spreading agents and plant growth regulators.

Claim 12. (Canceled)

Claim 13. (Currently amended) ~~A~~ The root-inducing system of claim 5 further comprising:  
a solution comprising water, a nonyl phenyl ether, and a root-inducing compound of formula I



wherein R is selected from the group consisting of hydrogen, allyl, methyl, ethyl, 1-propyl, 2-propyl, 1-butyl, isobutyl, (R)2-butyl, (S)2-butyl, tert-butyl and 1-pentyl;

a rootless cutting having at least one leaf;

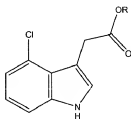
wherein the root-inducing compound of formula I is in a concentration sufficient to induce the generation of roots from the rootless cutting when the solution is applied to the at least one leaf of the rootless cutting; and

a sprayer to apply the solution to the rootless cutting.

Claim 14. (Canceled)

Claim 15. (Previously presented) The root-inducing system of claim 5 further comprising:  
 an automated sprinkling system wherein said sprayer is permanently affixed to said automated sprinkling system.

Claim 16. (Previously presented) A root-inducing combination comprising:  
 a solution selected from the group consisting of water, alcohols, and organics;  
 a root inducing compound of formula I

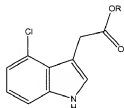


wherein R is selected from the group consisting of hydrogen, allyl, methyl, ethyl, 1-propyl, 2-propyl, 1-butyl, isobutyl, (R)2-butyl, (S)2-butyl, tert-butyl and 1-pentyl;  
 wherein the solution is mixed with the compound until a liquid having a concentration of  $10^{-7}$  to  $10^{-2}$ M of the compound is formed; and,  
 a rootless cutting having at least one leaf with a surface, wherein the liquid is applied to the surface of the at least one leaf to induce root formation in the rootless cutting.

Claim 17. (Currently amended) A method ~~to~~ for promoting root formation on cuttings from plants comprising:

- providing a solvent;
- providing a root inducing compound, wherein the root inducing compound is capable of generating root formation in a rootless cutting,
- mixing ~~a~~ the root inducing compound with the solvent to form a liquid;
- applying the liquid to a plant leaf of the rootless cutting to induce root formation.

Claim 18. (Currently amended) The method of claim 17 further comprising:  
providing a root inducing compound of formula I



wherein R is selected from the group consisting of hydrogen, allyl, methyl, ethyl, 1-propyl, 2-propyl, 1-butyl, isobutyl, (R)2-butyl, (S)2-butyl, tert-butyl and 1-pentyl; and  
forming a concentration of  $10^{-7}$  to  $10^{-2}$ M of the root inducing compound of formula I.

Claim 19. (Canceled)

Claim 20. (Previously presented) The method of claim 17 further comprising:  
adding beneficial agricultural chemical, wherein the beneficial agricultural chemical is selected from the group consisting of fertilizers, spreading agents and plant growth regulators.

Claim 21. (Currently amended) A The method of claim 17 further for promoting root formation on cuttings from plants comprising:

providing a solvent;

providing a root-inducing compound, wherein the root-inducing compound is capable of generating root formation in a rootless cutting;

adding sodium dodecylbenzenesulfonate;

mixing the root inducing compound with the solvent to form a liquid;

applying the liquid to a plant leaf of the rootless cutting to induce root formation.

Claim 22. (Currently amended) A ~~The method of claim 17 further~~ for promoting root formation on cuttings from plants comprising:

providing a solvent;

providing a root inducing compound, wherein the root inducing compound is capable of generating root formation in a rootless cutting;

adding nonyl phenyl ether;

mixing the root inducing compound with the solvent to form a liquid;

applying the liquid to a plant leaf of the rootless cutting to induce root formation.

Claim 23. (Previously presented) The method of claim 17 further comprising:

placing the liquid in a sprayer capable of containing the solution.

Claim 24. (Currently amended) A ~~The method of claim 17 further~~ for promoting root formation on cuttings from plants comprising:

selecting a stem without roots having at least one leaf;

positioning the stem into a soil plug;

providing a solvent;

providing a root-inducing compound, wherein the root inducing compound is capable of generating root formation in a rootless cutting,

mixing a root-inducing compound with the solvent to form a liquid;

applying the liquid to a plant leaf of the rootless cutting to induce root formation.